

CLAIMS

WHAT IS CLAIMED IS

1. A method for grinding a magnetic member, comprising:
5 a first step of grinding a magnetic member by grinding means having an edge including heat resistant resin and super hard abrasive grain while supplying grinding fluid to a grinding region; and
10 a second step of magnetically separating sludge from the grinding fluid drained from the grinding region.
2. The method according to Claim 1, further comprising a third step of separating the sludge from the grinding fluid by sedimentation of the sludge.
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3. The method according to Claim 1, wherein the magnetic member includes a rare-earth alloy, the second step using magnetic separation means having a surface magnetic flux density not smaller than 0.25 T 20 for separation of the sludge.
4. The method according to Claim 1, wherein the grinding fluid is primarily made of water.
- 25 5. The method according to Claim 1, wherein the grinding fluid after separation of the sludge is supplied to the grinding region for use in circulation.

6. A method for treating waste fluid, comprising a step of separating sludge containing a rare-earth alloy from waste fluid by using magnetic separation means having a surface magnetic flux density not smaller than 0.25 T.

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Sub A2
7. The method according to Claim 6, wherein the sludge is further separated from the waste fluid by sedimentation of the sludge.

□ 10 8. An apparatus for grinding a magnetic member, comprising:

grinding operation means for grinding a magnetic member by using grinding means having an edge including heat resistant resin and super hard abrasive grain while supplying grinding fluid to a grinding region; and

magnetic separation means for separating sludge from the grinding fluid drained from the grinding region.

Sub A3
9. The apparatus according to Claim 8, further comprising a tank disposed on a downstream side of the magnetic separation means, for reception of the grinding fluid.

10. The apparatus according to Claim 8, wherein the magnetic member includes a rare-earth alloy, the magnetic separation means having a surface magnetic flux density not smaller than 0.25 T.

25 11. The apparatus according to Claim 8, wherein the grinding

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fluid is primarily made of water.

12. The apparatus according to Claim 8, further comprising
circulating means for supplying the grinding fluid after
5 separation of the sludge to the grinding region for use
in circulation.

13. An apparatus for treating waste fluid, comprising
magnetic separation means having a surface magnetic flux
10 density not smaller than 0.25 T for separating sludge
containing a rare-earth alloy from waste fluid.

14. The apparatus according to Claim 13, further comprising
a tank disposed on a downstream side of the magnetic
15 separation means, for reception of the waste fluid.

15. A rare-earth magnet obtained by using a grinding method:
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the method comprising; a first step of grinding a magnetic
member by grinding means having an edge including heat
20 resistant resin and super hard abrasive grain while
supplying grinding fluid to a grinding region, and a second
step of magnetically separating sludge from the grinding
fluid drained from the grinding region.

A4

Arch A5